

KLBS0002-100

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: **Charlton et al.**Serial No.: **10/524,082**Group Art Unit: **To Be Determined**Filing Date: **Herewith**Examiner: **To Be Determined**

For: Methods for the Treatment of an Infectious Bacterial Disease with an Anti-Lactone or Lactone Derived Signal Molecules Antibody

EXPRESS MAIL LABEL NO: EL 963418760 US
DATE OF DEPOSIT: JUNE 14, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.56 and in accordance with 37 C.F.R. §§ 1.97 and 1.98, information relating to the above-identified application is hereby disclosed, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO Forms SB/08A and SB/08B, formerly known as PTO Form 1449 submitted herewith.

Inclusion of the information submitted herewith is not to be construed as an admission that the information is material as that term is defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

This Information Disclosure Statement is being filed:

- ☐ within three months of the filing date of the patent application.
- ☐ within three months of the date of entry into the national stage as set forth in 37 C.F.R. § 1.491 of the international application.
- ☒ **before** the mailing date of a first Office Action on the merits.
- ☐ **after** the mailing date of a first Office Action on the merits, but before the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of Allowance under 37 C.F.R. § 1.311, and accordingly is accompanied by:

☐ the Statement under 37 C.F.R. § 1.97(e) (see "Statement" below);

or

☐ the Fee of \$180.00 set forth in 37 C.F.R. § 1.17(p); or

☐ No fee is owed by the applicant(s).

☐ In accordance with 37 C.F.R. § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, and accordingly is accompanied by the Statement under 37 C.F.R. § 1.97(e) (see "Statement" below) and the fee of \$180.00 as set forth in 37 C.F.R. § 1.17(p), is attached.

☐ **after** the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of Allowance under 37 C.F.R. § 1.311, but before the payment of the Issue Fee, and accordingly is accompanied by the Statement under 37 C.F.R. § 1.97(e), (see "Statement," and "Fees" below).

☒ Copies of the references (excluding the U.S. Patent Documents) listed on the attached PTO Forms SB/08a and SB/08b, formerly known as PTO Form 1449 are enclosed. A copy of International Search Report dated December 12, 2003 for International Application No. PCT/GB03/03529 is also enclosed.

EXCEPT THAT:

☐ In view of the voluminous nature of reference @@@, and the likelihood that this reference is available to the Examiner, copies are not enclosed herewith.

☐ In accordance with 37 C.F.R. § 1.98(d), copies of the following references listed on the attached PTO Form SB/08A and PTO Form SB/08B, formerly known as PTO Form 1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application.

☐ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

Statement under 37 C.F.R. § 1.97(e)

- ☐ The undersigned attorney hereby states that each item information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.

Fees

- ☒ No Fee is owed by the applicant(s).
- ☐ The Information Disclosure Statement Fee of \$180.00 under 37 C.F.R. § 1.17(p) is enclosed herewith.

Method of Payment of Fees

- ☐ Attached is a check in the amount of \$_____. This form is submitted in duplicate.
- ☐ Charge Deposit Account No. 50-1275 in the amount of \$180.00. This form is submitted in duplicate.
- ☒ Please charge any deficiency or credit any overpayment to Deposit Account 50-1275.
- ☐ No fee or Statement is required under 37 C.F.R. § 1.97(b).

Respectfully submitted,



Paul K. Legaard, Ph.D.
Registration No. 38,534

Dated: June 14, 2005
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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	2
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Complete if Known

Application Number	10/524,082
Filing Date	Herewith
First Named Inventor	Keith Alan Charlton
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	KLBS0002-100

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 2 of 2

Complete if Known

Application Number	10/524,082
Filing Date	Herewith
First Named Inventor	Keith Alan Charlton
Art Unit	To Be Determined
Examiner Name	To Be Determined
Attorney Docket Number	KLBS0002-100

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AE	Charlton et al., "The isolation of super-sensitive anti-hapten antibodies from combinatorial antibody libraries derived from sheep," <i>Biosensors & Bioelectronics</i> (2001) 16:639-646.	
	AF	Chen et al., "Structural identification of a bacterial quorum-sensing signal containing boron," <i>Nature</i> (2002) 415:545-549.	
	AG	Dong et al., "Quenching quorum-sensing-dependent bacterial infection by an N-acyl homoserine lactonase," <i>Nature</i> (2001) 411:813-817.	
	AH	Finch et al., "Quorum sensing: a novel target for anti-infective therapy," <i>J. of Antimicrobial Chemotherapy</i> (1998) 42:569-571.	
	AI	Hartman et al., "Quorum sensing: potential means for treating gram-negative infections?" <i>The Lancet</i> (1998) 351:848-849.	
	AJ	Mayville "Structure-activity analysis of synthetic autoinducing thiolactone peptides from <i>Staphylococcus aureus</i> responsible for virulence," <i>PNAS USA</i> (1999) 96:1218-1223.	
	AK	Moghaddam et al., "Identification of scFv antibody fragments that specifically recognize the heroin metabolite 6-monoacetylmorphine but not morphine," <i>J. Immunological Methods</i> (2003) 280:139-155.	
	AL	Moghaddam et al., "Selection and characterization of recombinant single-chain antibodies to the hapten Aflatoxin-B1 from naïve recombinant antibody libraries," <i>J. Immunological Methods</i> (2001) 254:169-181.	
	AM	Reverchon et al., "New synthetic analogues of N-acyl homoserine lactones as agonists or antagonists of transcriptional regulators involved in bacterial quorum sensing," <i>Bioorganic & Medicinal Chemistry Letters</i> (2002) 12:1153-1157.	
	AN	Wu et al., "Detection of N-acylhomoserine lactones in lung tissues of mice infected with <i>Pseudomonas aeruginosa</i> (2000) 146:2481-2493.	
	AO	International Search Report dated December 12, 2003 for International Application No. PCT/GB03/03529.	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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